

REMARKS/ARGUMENTS

Favorable reconsideration of this application in light of the following discussion is respectfully requested.

Claims 1-23 and 27-30 are presently pending in this case.

In the outstanding Official Action, Claims 21 and 23 were rejected under 35 U.S.C. §101; Claims 1-23, and 27-30 were rejected under 35 U.S.C. §103(a) as unpatentable over Fanning et al. (U.S. Patent No. 6,742,023, hereinafter “Fanning”) in view of Weinmann (U.S. Patent No. 7,096,464) and Kohonen et al. (“Self Organization of a Massive Document Collection,” hereinafter “Kohonen”).

With regard to the rejection of Claims 21 and 23 under 35 U.S.C. §101, it is respectfully noted that Claim 21 *is* a method claim having two steps: “storing” and “transmitting,” contrary to the assertion in the outstanding Office Action that “They are clearly not a series of steps.”¹ Further, it is respectfully submitted that the correct test for subject matter eligibility is whether or not the claim is drawn to an abstract idea, and if so does the claim preempt that abstract idea.

In the present case, Claim 21 recites a particular machine or apparatus, namely a storage node including an indexer and a client system. In fact, the outstanding Advisory Action conceded that Claim 21 claims a particular machine at page 2, lines 13 and 14. Accordingly, it is respectfully submitted that Claim 21 is not drawn to an abstract idea, and therefore complies with 35 U.S.C. §101.

However, the outstanding Office Action apparently asserts that any claim including the word “logic” is not statutory subject matter. No basis for this assertion has been provided. It is respectfully noted that MPEP §2106.01 states:

Computer programs are often recited as part of a claim. USPTO personnel should determine whether the

¹See the outstanding Office action at page 2, line 25.

computer program is being claimed as part of an otherwise statutory manufacture or machine. In such a case, the claim remains statutory irrespective of the fact that a computer program is included in the claim. The same result occurs when a computer program is used in a computerized process where the computer executes the instructions set forth in the computer program. Only when the claimed invention taken as a whole is directed to a mere program listing, i.e., to only its description or expression, is it descriptive material per se and hence nonstatutory.

(Emphasis added.)

Accordingly, even if the assertion that the preamble of Claim 21 recites a computer program due to use of the word “logic,” Claim 21 remains statutory if it is not drawn to an abstract idea. As noted above, it is respectfully submitted that the claimed storage node including an indexer and a client system is a particular machine, and thus Claim 21 is not drawn to abstract idea. It is further respectfully submitted that there is no basis for ruling that such a statutory machine is non-statutory based on inclusion of the word “logic” in the preamble of the claim. Consequently, it is respectfully submitted that Claim 21 (and Claim 23 dependent therefrom) is in compliance with all requirements under 35 U.S.C. §101.

With regard to the rejection of Claims 1, 16, 17, 21, and 22 as unpatentable over Fanning in view of Weinmann and Kohonen, that rejection is respectfully traversed.

Claim 1 recites in part:

a data network;
an information retrieval client system connected to said data network; and
a plurality of information item storage nodes connected to the data network,
wherein *each storage node comprises a store configured to store a plurality of information items and an indexer, the indexer configured to derive data representing an information item, the data representing the information item, when stored, requiring less storage capacity than a corresponding information item, the indexer further configured to send the data representing the information item to the client system via said data network, the indexer configured to maintain a register indicative of whether the data representing the information item has previously been transmitted to the client system, to cause data representing*

information items which have not previously been transmitted to the client system to be forwarded to the client system, and to update the register in accordance with the data representing information items which were forwarded to the client system, and

said client system includes a node position generating unit configured to generate a node position in respect of each information item represented by said received data responsive to the data representing the information item received from said indexer of a storage node.

In an exemplary embodiment of the claimed invention, the indexer 890 is found in a plurality of information storage nodes 810 distinct from an information retrieval client 800 (see Figure 12 of the present application). These nodes contain both the storage 870 for the information items and the indexer 890. In contrast, Fanning explicitly recites an index server 300 that is a remote entity separate from the distribution applications 10, 100, 12, 212 that hold information items on user devices (see below for details).

Accordingly, in practice Fanning will operate differently than the present invention, and this is indeed the case, as described in Fanning. Turning first to page 4 of the outstanding Office Action substantiating items A-C as labeled by the outstanding Office Action in relation to Claim 1, we note that Figure 1 of Fanning shows distribution applications 10 and 12 connected via a network cloud. In relation to this Figure, the outstanding Office Action equates the distribution applications 10 and 12 with the information item storage nodes 810 of the claimed invention (page 4, lines 18-19 of the outstanding Office Action). However, if this is so, then where is the indexer of the information storage nodes in distribution applications 10 and 12? None of items 14, 16, 18 or 20 in the distribution applications is ever described as performing an indexing function. In fact, referring to column 5, lines 17-20 of Fanning, the distribution applications 10 and 12 communicate with the remote index server 300, in the same way that distribution applications 100 and 212 are explicitly drawn communicating with it in Figures 3 and 5. Thus Fanning explicitly and only describes that the indexer is a *separate entity* from the distribution applications.

Consequently, the distribution applications 10, 12 of Fanning cannot be properly equated with the storage nodes 810 of the presently claimed invention as they do not include all the features of these nodes.

Next, it is respectfully submitted that the client/server model of Figure 2 of Fanning teaches away from the claimed invention. Fanning shows a plurality of peer devices 12. By contrast, the presently claimed invention comprises heterogeneous components; an information retrieval client system and also a plurality of information item storage nodes. If each device was an identical peer device, then the present claims would also recite a plurality of information retrieval client systems, or alternatively a plurality of devices comprising an information retrieval client system and an information item storage node. However, the present claims do not because, as is clear from Figure 12 of the present application, the present system does not relate to a plurality of peer devices. Moreover, Figure 2 of Fanning relates to distribution applications 12 of the type described in Figure 1, which as noted above are only taught to use a remote indexing server 300, at column 5, lines 17-20. Thus, all that Fanning appears to describe it is that a plurality of distribution applications sharing data peer to peer can also all reference a remote indexing service. This is not what is presently claimed in items A-C.

Turning now to item D of the outstanding Office Action, the outstanding Office Action's assertion that in Fanning each storage node comprises a store configured to store a plurality of information items *and* an indexer is respectfully traversed. It is respectfully noted that the comparison of either of Figures 3 and 5 of Fanning, which shows file index server 300, to Figure 12 of the present application makes clear that the architecture of Fanning is totally different to that of the present invention. Specifically, referring to column 5, lines 41-49 and Figure 3 for example, Fanning makes clear that the file indexer 300 is wholly separate to the distribution applications 100, 212, and that the distribution applications

comprise the data file repositories 116, 216 (i.e. storage for information items). Alternative embodiments found at column 5, lines 54-59 of Fanning list other ways in which the data file repositories can be stored, but these to relate to organization within the distribution application, and **none** of them include storing the data with the indexer.

Furthermore, column 6, lines 52-64 of Fanning makes clear that the index server 300 only stores descriptions of the information items held in the client repositories.

It is also respectfully noted that the same holds for the distribution applications 10 and 12 of Figure 1. As noted previously, column 5, lines 17-20 of Fanning make clear that indexing for these applications is also made available by remote indexing server 300.

Thus in Fanning the information items themselves are not stored with the indexer in any embodiment. To put it the other way, the applications 10, 100, 12, 212 storing the information items do not comprise an indexer 300.

In contrast, Figure 12 of the present application shows a plurality of remote storage nodes 810 (as opposed to the single server shown in Fanning), each of which includes an information item store 870 **and** an indexer 890. As shown above, **Fanning simply does not describe this.**

Regarding item E of the outstanding Office Action, the outstanding Office Action's assertion that Fanning teaches that an indexer is configured to derive representative data requiring less capacity to store is again respectfully traversed.

Notably, the present claims identify this as a function of the indexer. However in the cited portion of Fanning (column 13, lines 6-24), the distribution applications 100, 212 rip CDs to MP3s. This passage in fact makes no reference whatsoever to the index server 300 or to descriptions of the data. At best, the skilled person will assume that as per column 6, lines 52-64 of Fanning, it is implied that the index server 300 again stores descriptions of these MP3 data items.

It is further respectfully submitted that in any event an MP3 cannot reasonably be construed as an ‘index’ of a CD track or even a description ‘representing’ a CD track, as it actually comprises the whole substantive content of the CD track transcoded to a more efficient format. This should be contrasted for example with a short audio clip of the item, or in video, a representative key frame or similar. Moreover, since Fanning clearly describes that **descriptions** of tracks are stored by the index server 300 (e.g. at column 6, lines 2-64), it would be perverse to ignore such descriptions and instead choose to cite re-coded versions of the content as the equivalent descriptors.

Thus, Fanning describes that a distribution application 10, 100, 12, 212 can perform format conversions, and that a remote index server 300 can store descriptions of what is held by the distribution applications, but Fanning absolutely does **not** teach that a storage node connected to a client via a network stores information items and comprises an indexer that generates representative data requiring less capacity to store than those information items. Accordingly, Fanning does not teach or suggest the features in items D or E of the outstanding Office Action.

Turning now to Weinmann and points G-I of the outstanding Office Action, we note that Weinmann is directed to providing software updates to a user’s application. In this regard, Wienmann only sends to the user the actual information item (i.e. the software update), as recited in the passages identified in the outstanding Office Action in relation to point H. Thus, Weinmann does **not** maintain a register checking whether indexed representations of those software updates have been sent to the user, because such representations are **not sent** to the user - only the information items themselves. As a result, it does not disclose either feature relating to items G or H, as Weinmann does not transmit representations of the software updates but the actual updates themselves, and consequently does not update a register to reflect this.

Application No. 10/664,189
Reply to Office Action of April 29, 2010

As Fanning does not teach or suggest at least the features recited in items D and E of the outstanding Office Action, and Weinmann does not teach or suggest at least the features recited in points G and H of the outstanding Office Action, the proposed combination does not teach or suggest “a storage node,” “an indexer,” and “a node position generating unit” as defined in Claim 1. Therefore, Claim 1 (and Claims 2-15 dependent therefrom) is patentable over Fanning in view of Weinmann and Kohonen.

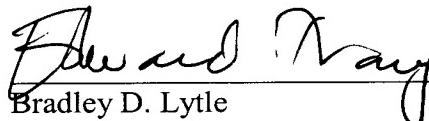
In a similar manner, the “store” of Claim 16, the “node position generating unit” of Claim 17, the “maintaining,” “forwarding,” and “updating” of Claims 20-22 are not believed to be taught or suggested by the proposed combination either. Accordingly, Claims 16-23 are also patentable over Fanning, Weinmann, and Kohonen.

If the present rejection is to be maintained, it is respectfully requested that the next office communication provide the reasoning as to how the cited portions of the references map onto the claimed features for the purpose of facilitating the appeals process.

Accordingly, the pending claims are believed to be in condition for formal allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, L.L.P.



Bradley D. Lytle
Attorney of Record
Registration No. 40,073

Edward W. Tracy, Jr.
Registration No. 47,998

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 07/09)